

Amendments to the Specification:

Please replace the abstract with the following amended abstract:

Correcting a signal offset may include observing a finite duration signal y_n that comprises a representation of a mixture of a desired signal that may include data of interest, and an undesired signal based on interference of an external interference source. The undesired signal may include an offset component which may be modeled as comprising a step function u defined by unknown step function parameters. The unknown step function parameters may be estimated using, for example, a maximum likelihood method. Thereafter, y_n may be corrected based on the estimated step function parameters.